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Monthly Statistical Report

Prepared by the Finance, Accounting, and Statistics Department

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JULY 1992

SUMMARY

June's weak demand for petroleum carried forward into July, with total deliveries last month dropping 1.3 percent versus one year earlier. In fact, July's deliveries, as with June, made an even poorer showing than might have been expected based on the trends of earlier this year. This suggests that petroleum deliveries, along with the economy as a whole, have been suffering the consequences of a lethargic recovery.

The weakest performers among the major products were gasoline and residual fuel oil, which dropped 0.8 and nearly 18 percent, respectively, from last July. Deliveries of "other oils", with a 3.8 percent year-to-year drop, also contributed significantly to the weakness in total deliveries. Somewhat brighter results were apparent for distillate fuel oil and kerosine jet fuel, which rose 3.8 percent and 3.3 percent, respectively, over year-ago levels due to higher truck traffic and continued growth in air travel.

Meanwhile, total petroleum imports surpassed 8.5 million B/D in July for the first time in nearly a year—and amounted to over 50 percent of deliveries for the month. Though we estimate that the underlying trend in import reliance is in the neighborhood of 45-46 percent, the highly variable nature of imports and deliveries means that the odds of exceeding 50 percent in a given month increase as the underlying trend in import reliance grows. Total imports as a percent of domestic deliveries on a monthly basis exceeded the half-way mark only three times in the 1970s—but this is the eighth time in the last three years that the ratio has exceeded 50 percent.

With relatively static demand, the main factor behind the trend in imports requirements has been the decline in domestic crude oil production, which dropped another 2.7 percent or 200 thousand B/D in July, year to year. A larger-than-typical, 6.6 percent decline in Alaska was partly offset by an smaller-than-average, 1.5 percent decline for the lower 48.

At refineries, activity continued at a relatively strong pace in July, with input to distillation units in the past two months at the highest rates in nearly two years. Thus, despite the surge in crude oil imports, crude oil stocks rose a slight 2 million barrels, remaining on the lower end of the range of recent experience.

Inventories as a whole, however, have been building steadily over the past two months, and ended July at fairly typical levels for midsummer. Gasoline stocks fell 5 million barrels for the month, but at 218 million barrels, were still at normal levels at month-end. Distillate stocks, on the other hand, despite a 12 million barrel build, were at the low end of the range compared with recent Julys.

PRODUCT SUPPLIED [1]

Gasoline

DELIVERIES DROP FOR THIRD MONTH. Weak gasoline deliveries continued in July, dropping 0.8 percent—the third year-to-year loss in a row. Though, for the year to date, deliveries still show an increase marginally under 1 percent, most of this was in the first quarter, the result of even weaker deliveries a year ago and better-than-average winter driving conditions. Over the past three months, gasoline deliveries have averaged about a 1 percent decline.

Travel data, at least so far as they are available, have shown a similar pattern. Thus, growth in miles traveled early in the year had been reported at 4-5 percent, year to year, but dwindled to about 3 percent by May. Despite slowing from somewhat anomalous growth rates earlier this year, we estimate that, on a month-to-month basis, travel is still rising at a 2-3 percent annual rate.

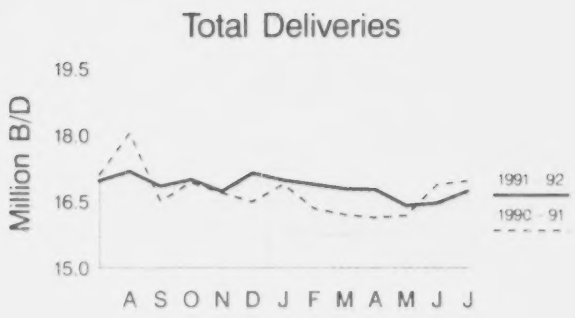
Retail gasoline prices for the month as a whole averaged about the same in July as in June, but at month-end they had dropped about 1.5 cents per gallon from the end of June. Over the spring, prices had risen about 12 cents per gallon as a result of rising crude costs, seasonal demand, and more stringent vapor pressure requirements for summer gasoline than in the past.

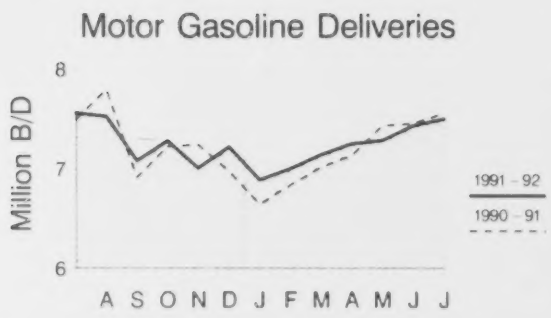
Distillates

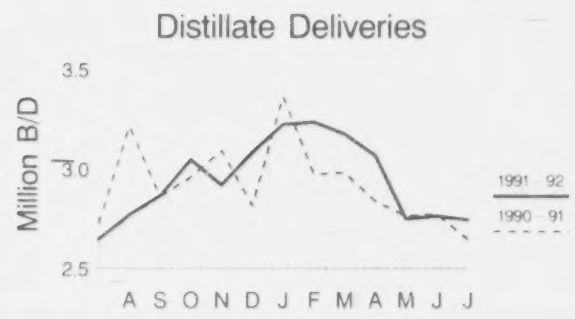
TRANSPORT USE CONTRIBUTES TO GROWTH. After two months of moderate year-to-year declines, distillate deliveries bounced back in July with an increase of 3.8 percent. Commercial transportation continues to be the major factor contributing to distillate's growth. Although the economic recovery as a whole has been lackluster so far, truck traffic has continued to show sizable gains over year-ago levels and rail ton-miles were up roughly 3 percent in July.

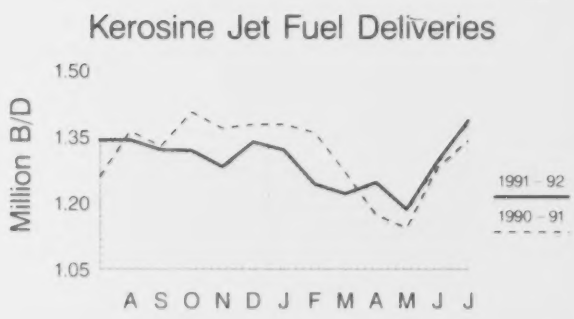
API ESTIMATES

	JULY		YEAR-TO-DATE	
	Million B/D	Percent Change	Million B/D	Percent Change
Total domestic deliveries	16.7	(1.3)	16.7	1.2
Crude production[2]	7.1	(2.7)	7.2	(3.2)
Total imports[2]	8.5	9.8	7.6	1.5
Stocks (million bbl)[2]	1,075	0.8	na	na









Of the major products, distillate fuel oil has been the only one to show much real growth for the first seven months of 1992 as a whole. Though kerosine jet fuel deliveries have been strengthening in recent months, distillate fuel oil, with its 3.0 percent growth so far in 1992, has been the largest single contributor to overall deliveries' 1.2 percent increase for the year to date.

Kerosine Jet Fuel

STRENGTH IN AIR TRAVEL BOOSTS CONSUMPTION.

In conjunction with air travel which is believed to have eclipsed its previous high for the month of July, deliveries of jet kerosine also reached an all-time high for the month. At 1.387 million B/D, deliveries were up 3.3 percent from their year-ago level, and were among their highest for any month ever. It was the fourth consecutive month in which deliveries grew on a year-to-year basis, after eight successive months of declines. Growth in passenger travel on commercial airlines has accelerated somewhat since steep fare reductions were first offered in late May. Particularly on domestic routes, air travel has seen a rather dramatic turnaround—although higher load factors have cushioned the impact on miles flown. Down about 1 percent through the first five months of the year, domestic passenger travel is estimated to have grown by about 10 percent in June and July. However, aircraft miles flown on these routes increased more in the 3-4 percent range, as planes were generally filled closer to capacity. System wide, including international traffic, growth in miles flown has been slightly higher in recent months as well, perhaps in the 5-6 percent range—moderately higher than the increase in jet kerosine deliveries.

Residual Fuel Oil

SHRINKING DEMAND LEADS TO ANOTHER RECORD LOW.

Moderate summer weather, declines in electricity generation, and more competitive natural gas prices all contributed to resid's continued slide in July. At 918 thousand B/D, deliveries were off nearly 18 percent, year to year, during the month, reaching another post-WWII low. On a weather-adjusted basis, however, declines were closer to 10 percent.

In recent years, resid deliveries during July have been higher, on average, than during any other non-winter month, as space cooling needs have pushed electricity demand up. However, with the number of cooling degree days in the East falling by more than a third from last July, electricity demand in the New England and Mid-Atlantic states fell roughly 5 percent, year to year, during the month. Resid likely bore a disproportionate share of the decline in electricity output. What's more, after similarly moderate weather in June, non-primary inventories are thought to have been relatively high entering the month, allowing some utilities to put off purchases. Warmer weather in Florida, and increased calls on resid-fired capacity in that state, only partially offset the declines in the Northeast.

Demand indicators were only slightly better in industrial markets. Government figures on industrial output were up, year to year, during June (the most recent month available). However, the 0.8 percent increase from last June trailed the 2.3 percent increases seen in recent prior months.

The one-year anniversary of the implementation of a 8.25 percent sales tax on bunker fuels in California was marked in mid-July. By some estimates, the tax pushed more than half of the

state's roughly 160 thousand B/D of resid bunker demand beyond its borders (a not-insignificant portion of which is believed to have left the country). While ocean-borne trade (particularly energy) is believed to have been up year to year—thus buoying resid bunker demand—the impact of the bunker tax would appear to be the more dominant factor.

Other Oils

PREVIOUS GROWTH FALTERS IN PAST TWO MONTHS.

July's deliveries for the "other oils" category, as with deliveries as a whole, continued the weakness of June. Deliveries were off an estimated 3.8 percent from a year ago in July, similar to June's decline. Whether the weakness of the past two months signifies a downward shift in the moderate upward growth trend of earlier in the year remains to be seen. But for a product category that has tended to be stronger than petroleum deliveries as a whole over the last several years, a weakening in deliveries of "other oils" would be a noteworthy departure from the prior pattern.

SUPPLY [1]

Production

CRUDE DROPS 2.7 PERCENT.

Domestic crude oil production dropped 2.7 percent or 200 thousand B/D in July from a year ago, continuing the decline trend that resumed in the middle of last year after having briefly stabilized in the first part of 1991. The drop for Alaska, at close to 120 thousand B/D or 6.6 percent, was larger than in recent months, but was partially offset by a smaller-than-typical decline in the lower 48 of 1.5 percent. For the year to date, domestic crude oil production's drop still amounted to 240 thousand B/D or 3.2 percent.

Drilling activity continued to slide as well, according to the most recent API estimates of well completions. Overall, well completions in the first half of 1992 were off more than 20 percent from one year earlier. Even so, the decline for drilling as a whole was moderated by a less extreme dropoff for dry holes, with oil and gas completions each dropping by 25 percent or more.

Imports

IMPORTS EXCEED 50 PERCENT—AGAIN.

July's imports topped 8.5 million B/D for the first time in almost a year—and put total imports' share of domestic deliveries at 50.9 percent, exceeding the half-way mark for the eighth time in the past three years. (On a monthly basis, imports had surpassed 50 percent of deliveries once in 1989, four times in 1990, and twice last year). Imports exceeded the half-way point in all of these instances partly as a result of above-trend imports or below-trend deliveries. However, just as a sunbather is increasingly likely to get splashed by a strong wave as the tide rises, the frequency of the occurrence has tended to parallel the trend in underlying import dependency. We estimate that underlying dependency so far in 1992 has been running at 45-46 percent.

Historical estimates of this underlying dependency (essentially adjusting for unusual inventory movements and typical seasonal patterns), show that, for example, it was running at around 45 percent in the late 1970s, declined to the low 30s in the mid-1980s, and rose to 46-47 percent in 1989. After a slight drop in the past two years because of the fall-off in petroleum consumption, the trend, we estimate, has begun to again rise gradually as domestic production has declined.

The main component of July's jump in imports was crude oil, which, at nearly 6.8 million B/D, was at a level among the highest observed since the late 1970s. Product imports, on the other hand, were actually off 1.7 percent from a year ago, and at less than 1.8 million B/D, were not outside the range of the past twelve months.

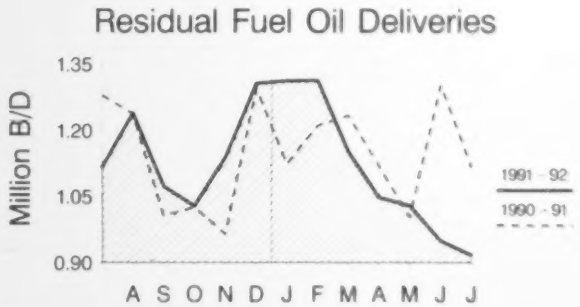
Imports of finished gasoline were up nearly 120 thousand B/D from a year ago to 350 thousand B/D, though the 150 thousand B/D drop in residual fuel oil deliveries, reflecting weak demand, more than offset gasoline's gain. Distillate imports were up 80 thousand B/D to 235 thousand B/D, while imports of other products were off 80 thousand B/D or 8 percent.

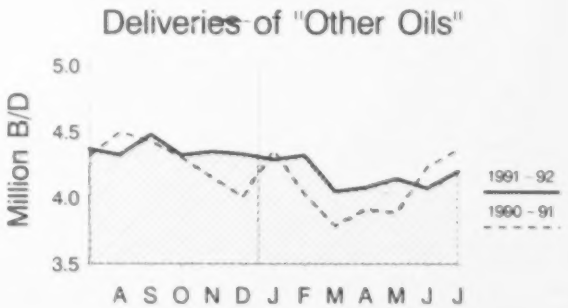
Refinery Operations

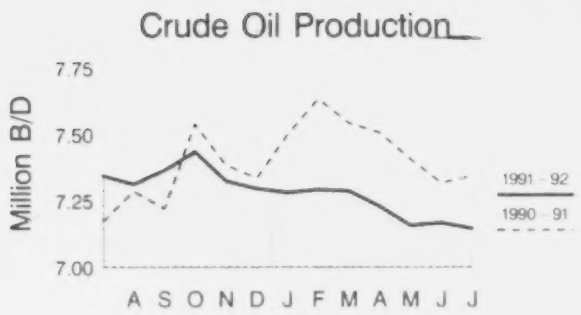
STRONG RUNS BUT GASOLINE OUTPUT STILL DECLINES.

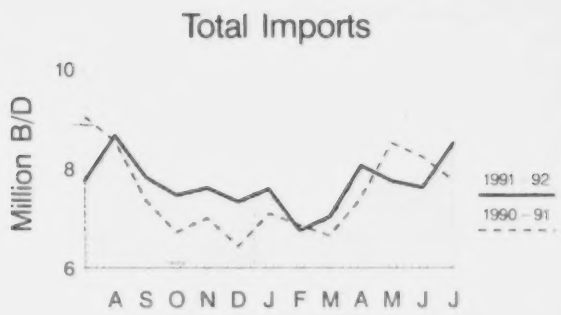
Refinery activity continued at a relatively strong pace in July. Input to distillation units in June and July has been at the highest rates in nearly two years, and utilization of capacity in actual operation has been running at an estimated 94-95 percent. (As a percent of reported capacity, utilization has approached nearly 92 percent for the past two months).

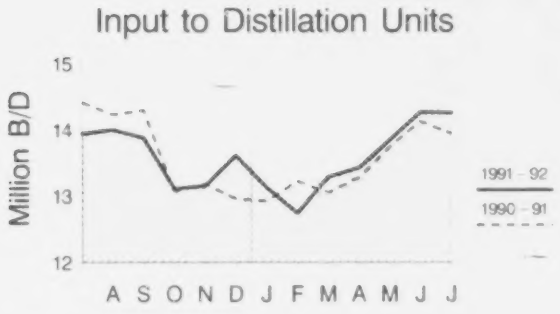
Refinery yield patterns continued to reflect the relative strengths of demand among the major products. Gasoline production slipped 1.3 percent from last July, while output of distillate fuel oil, with yields running a bit higher than average for mid-summer, was up 3.4 percent. Residual fuel oil production was off by over 9 percent to less than 800 thousand B/D—the lowest level in seven years. Meanwhile, kerosine jet fuel output, reaching nearly 1.4 million B/D, rose over 8 percent.

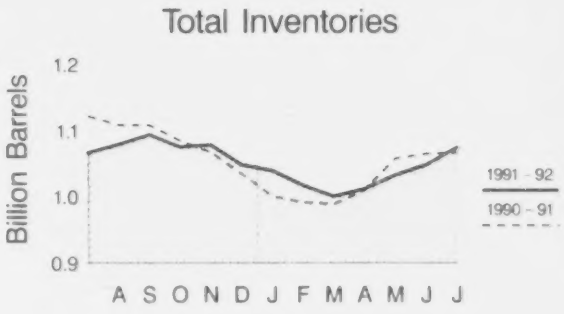












Inventories

STOCKS RISE OVER 40 MILLION BARRELS IN PAST TWO MONTHS. Inventories, rising 26 million barrels in July, continued to build more than seasonally, as they had in June. For June and July combined, total stocks have risen 42 million barrels, or about 25 million barrels more than the recent-year average, reaching more typical levels for the end of July than had been apparent in recent prior months.

Despite the surge in crude oil imports, crude stocks rose only slightly to 330 million barrels, and were still about 15 million barrels below average for the month. Gasoline stocks fell 5 million barrels to 218 million barrels, a level still about average for the end of July. Distillate stocks rose a not-so-unusual 12 million barrels, but at 115 million barrels, they were still at the low end of the range for month-end stocks of recent Julys.

1/ Total supply, i.e., production plus imports adjusted for net stock change is equal to total products supplied from primary storage. Total products supplied from primary storage less exports is equal to total domestic products supplied. Information contained in this report is derived from information published in the API Weekly Bulletin and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions.

2/ Includes lease condensate.

3/ API data do not include crude oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR (according to the U.S. Department of Energy, the SPR held approximately 570 million barrels as of July 31, 1992).

ESTIMATED UNITED STATES PETROLEUM BALANCE
(Daily Average in Thousands of 42 Gallon barrels)

Products Supplied/Supply From Primary Storage	JULY			YEAR-TO-DATE		
	1992[1]	1991[2]	% Change	1992[3R]	1991[2]	% Change
Products Supplied:						
Total motor gasoline	7,503	7,561	(0.8)	7,219	7,159	0.8
Finished leaded motor gasoline/*	105	291	(63.9)	122	276	(55.8)
Finished unleaded motor gasoline/*	7,398	7,270	1.8	7,097	6,883	3.1
Naphtha-jet	157	166	(5.4)	151	173	(12.7)
Kerosine-jet	1,387	1,343	3.3	1,272	1,277	(0.4)
Distillate fuel oil	2,748	2,648	3.8	2,995	2,908	3.0
Residual fuel oil	918	1,117	(17.8)	1,103	1,158	(4.7)
All other oils[4]	4,204	4,370	(3.8)	4,166	4,085	2.0
Reclassified[5]	-173	-234	(26.1)	-185	-240	(22.9)
Total domestic products supplied	16,744	16,971	(1.3)	16,721	16,520	1.2
Exports	911	963	(5.4)	939	1,047	(10.3)
Total products supplied	17,655	17,934	(1.6)	17,660	17,567	0.5
Supply:						
Domestic production:						
Crude oil[6]	7,147	7,347	(2.7)	7,225	7,465	(3.2)
Natural gas liquids	1,673	1,622	3.1	1,690	1,656	2.1
Other supply[7]	1,164	1,255	(7.3)	1,241	1,081	14.8
Total domestic supply	9,984	10,224	(2.3)	10,156	10,202	(0.5)
Imports:						
Crude oil, total[8]	6,745	5,955	13.3	5,863	5,734	2.2
Canadian	863	615	40.3	809	741	9.2
Other	5,882	5,340	10.1	5,054	4,993	1.2
Products, total	1,770	1,801	(1.7)	1,764	1,779	(0.8)
Residual fuel oil	272	420	(35.2)	347	416	(16.6)
Other	1,498	1,381	8.5	1,417	1,363	4.0
Total imports	8,515	7,756	9.8	7,627	7,513	1.5
Total supply	18,499	17,980	2.9	17,783	17,715	0.4
Stock change, all oils	844	46	******	123	148	******
Refinery Operations						
Input to crude oil distillation units	14,261	13,941	2.3	13,578	13,474	0.8
Operable capacity	15,567	15,694	(0.8)	15,627	15,695	(0.4)
Refinery utilization (%)[9]	91.6	88.8	3.2	86.9	85.8	1.3
Crude oil runs	14,024	13,703	2.3	13,364	13,261	0.8

Stocks (millions bbls.)	1992		1991[2]	% Change from	
	Jul. 31[10]	Jun. 30[10]	Jul. 31	Previous month	Year ago
Crude oil[6]	330.1	328.2	342.1	0.6	(3.5)
Unfinished oils	100.5	103.9	110.0	(3.3)	(8.6)
Total motor gasoline/**	218.4	222.9	208.5	(2.0)	4.7
Finished leaded motor gasoline/*	4.1	3.8	7.2	7.9	(43.1)
Finished unleaded motor gasoline/*	178.1	181.4	164.3	(1.8)	8.4
Naphtha-jet	5.1	5.7	5.8	(10.5)	(12.1)
Kerosine-jet	40.6	39.5	41.2	2.8	(1.5)
Distillate fuel oil	115.1	103.4	124.7	11.3	(7.7)
Residual fuel oil	38.3	39.4	43.7	(2.8)	(12.4)
All other oils	226.6	205.6R	190.5	10.2	19.0
Total all oils	1,074.7	1,048.6R	1,066.5	2.5	0.8

/1 Based on API estimated data converted to a monthly basis.
/2 Source: U.S. Department of Energy.
/3 January-May, DOE, June-July, API.
/4 Includes crude losses.
/5 Beginning with January 1981, U.S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassified during the production phase. So that there will be no double counting of these volumes, they are subtracted from the total domestic products supplied.
/6 API estimate; includes lease condensate.
/7 Includes Unaccounted-for crude oil, which will reflect withdrawls from the SPR when they occur, processing gain, field production of other hydrocarbons and alcohol.
/8 Data do not include oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR.
/9 Represents "Input to crude oil distillation units" as a percent of "Operable capacity".
/10 Derived by interpolating API weekly stocks data.
/R Revised.
/* Included in motor gasoline.
/** Includes finished leaded, finished unleaded, and motor gasoline blendingcomponents stocks.